Epicardial adipose tissue and its relation with arterial calcification in CKD patients

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Clinical evidence shown that visceral adipose tissue is an important marker of cardiovascular risk. There seems to be a connection between abdominal visceral adipose tissue and cardiovascular risk factors such as metabolic syndrome, diabetes and hypertension. Recently, another form of visceral fat, epicardial adipose tissue (EAT) has been associated with the presence of coronary artery disease (CAD) and episodes of cardiovascular events. EAT represent fat confined within the pericardial sac and is located on the surface of the heart, especially around the epicardial coronary vessels. EAT is known to be a rich source of free fatty acids and is believed to acts as an extremely metabolic active organ, with inflammatory and pro-atherogenic effects on the epicardial coronary arteries through local paracrine or vasocrine mechanism. Although EAT constitutes only 1% of total fat mass, prior studies revealed that the accumulation of EAT is associated with the presence and extent of CAD and coronary artery calcium as well. Chronic kidney disease (CKD) is believed to be a strong inflammation state and large evidence linked this condition as independent risk factor for CAD. There are limited studies that evaluate EAT as direct region specific measures of adipose tissue in uremic population. Our research focus in the relationship between EAT and coronary atherosclerosis/ischemia in dialysis population and shown that these complication are influenced by uremic relate factors.

Biography
Luis D'Marco obtained his medical degree and subspeciality training in Nephrology at the Universidad de Oriente (UDO), Venezuela. He is a member of the American Society of Nephrology, Sociedad Latinoamericana de Nefrología e Hipertensión, International Society of Nephrology and European Renal Association. He is an Assistant Professor in Nephrology at the Hospital Universitario Ruiz y Paez (UDO) and medical director of UniRenal (Advance Research and Diagnosis Renal Unit) in Venezuela. He was research fellow at Emory University, Atlanta, USA and completed his master degree in Diabetes primary care at Universidad Alcala de Henares, Spain. He has published papers in reputed journal as Nature reviews Nephrology, Nephrology Dialysis and Transplantation and Journal of Nuclear Cardiology.

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